



**Engineer Assistant in Biology : characterization of vascular cell biomarkers – 3-month
fixed-term contract
CENTRE CIS - STBIO**

JOB ENVIRONMENT:

Institut Mines-Télécom is the leading public group of engineering and management *Grandes Écoles* in France. Consisting of eight public graduate *Grandes Écoles* and two subsidiary graduate schools, *Institut Mines-Télécom* leads and develops a rich ecosystem of partner schools, economic, academic and institutional partners, key players in education, research and economic development.

Mines Saint-Étienne, a graduate school of the *Institut Mines-Télécom*, is responsible for education, research, innovation, industrial transfer and scientific culture dissemination. With 2,500 students, 500 staff and a budget of €50m, it has 3 campuses dedicated to the industry of the future, health and well-being, and digital sovereignty and microelectronics. It is ranked in the top 15 graduate engineering schools in France and the top 500 universities worldwide.

The 2023-2027 strategy of Mines Saint-Etienne is in line with that of *Institut Mines Telecom*. It aims to:

- Support the ecological, digital and generational transitions and educate the people involved
- Support national and European sovereignty in microelectronics and digital technolog

To support this strategy, it is recruiting an **engineer assistant in biology**.

JOB DESCRIPTION:

The CIS brings together 70 people, including 18 professors in engineering industrial/computing, biomechanics and healthcare engineering. Since its creation in 2004, the CIS has been representative of the ability of Mines Saint-Etienne to acquire leadership on innovative themes such as, for example, Soft tissue biomechanics. SAINBIOSE (INSERM UMR 1059) brings together researchers from the CIS (biomechanics, biomaterials and bioengineering), the faculty of Medicine from Jean Monnet University, Saint-Etienne University Hospital, Inserm and the French Blood Establishment. The global scientific objective of SAINBIOSE is a better understanding and of biostress in osteoarticular (LBTO team) and cardiovascular pathologie (DVH team).

Website: <https://sainbiose.univ-st-etienne.fr/>

Biomechanics, experimental and computational, is a major research topic of SAINBIOSE, which goes from modelling the mechanical behaviour of tissues to clinical and industrial applications, especially with the textile industry. The first one is about ~10 cm of height and width and will be used to visualize the particle packing by means of 3D - X rays micro-tomomography. The analysis of tomography images should allow us to eval- uate different parameters related to the particle packing and its homogeneity.

We are planning to open a non-permanent position of engineer assistant to join a team working on vascular biomechanics. The engineer assistant will collaborate with researchers conducting basic research in biomechanics and biomedical engineering, within the framework of a laboratory environment.

The work will be carried out at Mines Saint-Etienne, within the SAINBIOSE research unit (Inserm U1059).

The objective of the project is to collect data on the biomarkers expressed by cells of the vascular system.

The project will take place in a research group having 15 years experience in biomechanics (<https://emse.fr/~avril/>).

Tasks may change depending on the needs of the department and Mines Saint-Etienne.

The position is based on the Saint-Étienne campus, at the Centre Ingénierie et Santé (Hospital campus at the North of Saint-Etienne).

PROFIL SOUGHT:

You are in one of the following situations:

- 5 years' higher education or equivalent, or
- Bac + 4 or equivalent with professional experience ≥ 4 years, or
- Bac + 3 or equivalent with professional experience ≥ 6 years, or
- Bac + 2 or equivalent with professional experience ≥ 10 years

And ideally:

Holder of a master degree in biology

You have the following skills, knowledge and experience:

- Capacity to successfully integrate a team and a group within a R&D environment
- Good knowledge of basic cell biology
- First experience with vascular cells
- Expertise in front-end and back-end development

WHY JOIN US:

Institut Mines-Telecom is characterised by:

<https://www.youtube.com/watch?v=m39m6hdNC48>

- A scientific environment of excellence
- A group with entities throughout France

Mines Saint-Etienne is distinguished by:

- A privileged working environment with a high student supervision rate and a high environment rate (support and back-up functions)
- First-rate experimental and digital resources
- Significant contract research activity (€11m/year in Research and Innovation contracts), mainly with industrial partners
- 25% international students, Member of the T.I.M.E. network and the EULIST European University
- A centre for scientific, technical and industrial culture - *La Rotonde* - which is unique in France, and which has a major impact on society (> 50,000 visitors per year)
- Pleasant workplace, easily accessible by public transport and close to motorways
- Public transport costs reimbursed up to 75% (subject to conditions)
- Sustainable mobility package
- Staff committee that subsidises sports, leisure, cultural and social events and activities
- The possibility of partial remote working
- 49 days annual leave

ADDITIONAL INFORMATION:

Recruitment conditions:

- Fixed-term contract for a period of 3 months
- Desired start date: 01/07/2024
- Remuneration will be set according to the candidate's profile, based on the rules defined by the *Institut Mines Télécom*'s management framework
- Full time
- Position based in Saint-Étienne
- For internal use :
 - Category II - Job R - *Ingénieur de recherche et développement* according to the Management Framework

The position is open to all, with accommodation available on request for candidates with disabilities.

The job is open to civil servants and/or the general public.

All applications may be subject to an administrative enquiry.

How to apply:

Applications (CV, covering letter, letter of recommendation if applicable) must be submitted on the RECRUITEE platform **no later than 18/05/2024**:

<https://institutminestelecom.recruitee.com/o/engineer-assistant-in-biology-3-month-fixed-term-contract-2>

Candidates selected based on their application will be interviewed rapidly. Part of the interview will be held in English.

As part of its Equality, Diversity and Inclusion policy, École des Mines de Saint Etienne is an employer that is committed to fair treatment of all applicants.

For further information:

For further information about the position, please contact:

Stéphane AVRIL – Researcher at centre CIS

Email: avril@emse.fr

Tel: + 33 (0)4 77 42 01 88

For all administrative information, please contact:

Charlotte MOGIER – HR Administrator

Email: charlotte.mogier@emse.fr

Tel: + 33 (0)4 77 42 01 18

Useful links:

<https://www.mines-stetienne.fr/>

<https://www.imt.fr/>

<https://www.youtube.com/watch?v=QUeuC5iQiN0>

Protecting your data:

<https://www.mines-stetienne.fr/wp-content/uploads/2018/12/Informations-des-candidats-sur-les-traitements-de-donn%C3%A9es-personnelles.pdf>